Mobility support across hybrid IP-based wireless environment : review of concepts, solutions and related issues.

ABSTRACT

The 4G or Beyond 3G wireless networks is consist of IP-based heterogeneous access networks from 3G cellular, WiFi, WiMAX to other emerging access technologies such as mesh networks. The key objective of designing the next generation wireless networks is to support of mobile subscribers. To support the mobile host in the hybrid wireless access technologies, many solutions based on network protocol stack have been proposed in the literature. In this article, after review of mobility concepts, a special attention is given to some of the mobility management methods as well as handover techniques across various wireless access networks. We have also compared the major mobility protocols in each layer for their features. Finally, some of the open issues that needed to be addressed in mobility management protocol in the next generation wireless networks are outlined.